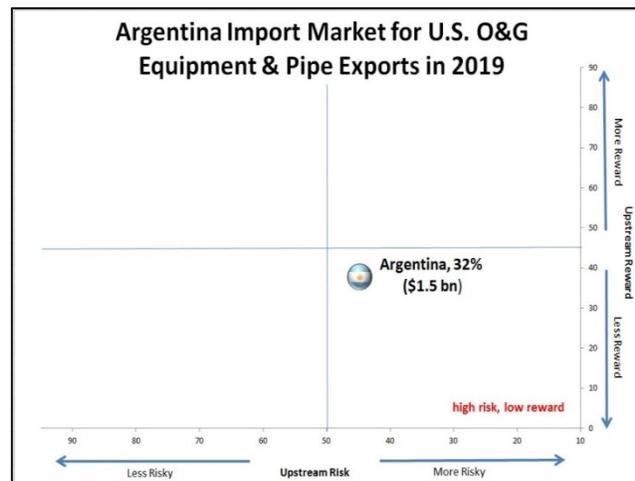


2016 Top Markets Report Upstream Oil and Gas Equipment Country Case Study

Argentina

Overall Rank: 13

Argentina's O&G sector is poised for strong growth as the result of an improving investment climate and new development in unconventional resources. Much of the investment activity will be in Argentina's shale formations, which are estimated to be the second largest in the world. The newly elected administration will likely continue to improve the investment climate through both macroeconomic and energy sector policy reform. Despite the promise of the sector, lingering concerns of the country's history of credit default and political volatility may inhibit long-term growth.



Background

Argentina ranks 32nd in the world for proven crude oil reserves and 36th for proven natural gas reserves. These estimates, however, do not include the country's unconventional gas reserves, which are estimated to be 30 times that of its conventional gas reserves, and unconventional oil reserves, which are nine times greater than its conventional reserves. Most of Argentina's unconventional resources are found in the Vaca Muerta shale formation, one of the most prolific unconventional formations in the world. The Vaca Muerta could hold up to 16.2 billion barrels of shale oil and 308 Tcf of shale gas.ⁱ Roughly the size of Belgium, the formation is estimated to need between \$140 and \$200 billion of total investment to reach its full level of production.ⁱⁱ

In 2015, Argentina had 2.4 billion barrels of proven oil reserves and 11.7 Tcf of proven gas reserves.ⁱⁱⁱ Chevron was an early mover into the sector with over \$2.75 billion invested in the Vaca Muerta shale formation and currently produces approximately 20,000 bbl/d. ExxonMobil and Shell are in the early stages of exploration in the region following changes to export restrictions and taxation in the sector, and ExxonMobil has recently announced further investment in the development of Vaca Muerta. While most investment is in onshore shale reserves, the country is also working to develop offshore operations. The country's NOC, ENARSA, was formed in 2004 and remains limited in its scope, but it does manage the majority of offshore reserves. These reserves have garnered interest from some IOCs, including Total.

Though crude production will rise in the near-term, increased domestic demand will require import of refined products. After nearly three decades as a net exporter of energy, Argentina began relying on foreign markets to meet its energy needs, importing 87,000 bbl/d of oil products in 2014. Bolivia provided 184 Bcf of natural gas imports via pipeline. An additional 244 Bcf was imported via the nation's two LNG terminals, most of which came from Trinidad and Tobago. Production increases over the next several years should allow net crude exports of 125,600 bbl/d, however, a lack of downstream capacity coupled with increased demand are projected to necessitate 168,200 bbl/d of imported refined petroleum products by 2019.^{iv}

Market Analysis

In 2014 the United States provided Argentina with 42.5 percent of its total O&G equipment imports, making it the number one exporter to the country. Of the \$345 million worth of O&G equipment the United States exported to Argentina in 2015, 41.9 percent were boring or sinking machinery and an additional 16.6 percent of the market was in positive displacement pumps.

Policy Context: Opportunities and Challenges

Argentina strongly supports increased O&G production through subsidies, but this policy is unsustainable. Restrictions on Argentina's ability to access international financial markets will likely be removed within the year, opening the way for greater commercial engagement. It will take time, however, for the new government to demonstrate that Argentina is once again a safe destination for foreign investors.

The oil production subsidy maintained by the government has encouraged greater domestic crude oil production, but the current price environment will make it difficult to sustain. In January 2016, the government set the per barrel price of domestically produced crude oil to \$67.50 for Medanito crude (the blend most common in the country). Despite public outcry from domestic consumers who bear the added costs, the national government maintains high natural gas prices to support greater production and investment in the sector. Natural gas prices in Argentina are two to three times those of the North

American markets (though comparable to prices in other South American countries). As investment increases and production rises, however, the argument for subsidization of the sector may weaken. Given the push toward market friendly policies, the price floor may be removed, though the recent moderate decrease in prices and desire for stability suggest this will occur over time.

The Argentine government has recently actively supported private-sector-friendly policies to improve relations and increase JVs in the O&G sector. Though not required, the majority of oil ventures in Argentina take place in JVs between IOCs and government entities. Provinces are the legal owners of natural resources and act as regulators and licensors on concessions, but recently, efforts have been made to standardize licensing and regulatory criteria through Ente Nacional Regulador Del Gas (ENARGAS), the federal regulatory body. The historical role of provinces has caused many of them to establish provincial oil companies (POCs), which often partner with IOCs in JV operations. Yacimientos Petrolíferos Fiscales (YPF), the 51 percent federal-government-owned entity, works with many IOCs in upstream production and also controls over 50 percent of the nation's 630,000 bbl/d refining capacity.

Government policies under the new president, Mauricio Macri, aim to aggressively increase domestic production and promote energy independence. In December 2015, the country lifted its long time capital controls, leading to an immediate devaluation of its currency by roughly 30 percent. As a result, production costs on local goods and labor have been reduced. This policy change also allowed repatriation of profits held by companies in the O&G sector. The administration is making efforts to repair relations with creditors, the results of which are beginning to come to fruition.

Macroeconomic and energy sector specific policy changes have been rapid in the first months of the Macri administration. While these policies have resulted in a fundamental shift in prospects for the industry, their staying power still remains in question. Though Macri's sweeping reforms are positive signs for the O&G sector, the pace at which he accomplished them is an indication of how quickly presidential power can alter the country's

economic and energy policy. In a country that has traditionally been prone to large policy swings, this

flexibility may dissuade long-term investments.

ⁱ <http://www.economist.com/news/americas/21613314-politics-biggest-hurdle-developing-enormous-vaca-muerta-field-dead-cow-bounce>

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ⁱⁱⁱ <http://www.eia.gov/beta/international/analysis.cfm?iso=ARG>

^{iv} BMI, Industry Forecast